

## I CLAIM:

1 1. A method of determining a current draw of a pump  
2 driven by an electric motor having a power line and a motor-  
3 control circuit connected to said power line, said method  
4 comprising the steps of:

5 (a) measuring a voltage drop across at least a portion  
6 of a conductor having a definite resistance and connecting said  
7 power line with said motor-control circuit; and

8 (b) calculating said current draw from said voltage  
9 drop.

1 2. The method defined in claim 1 wherein said portion  
2 of said conductor having said resistance is a piece of current  
3 supply line connecting the power line with said motor-control  
4 circuit.

1 3. The method defined in claim 1 wherein the voltage  
2 drop is measured and the current draw is calculated from said  
3 voltage drop by a computing unit forming part of said motor-  
4 control circuit.

1           4. The method defined in claim 1 wherein a current  
2 measured in said portion of said conductor is converted into a  
3 current draw of said pump.

1           5. The method defined in claim 1 wherein in  
2 calculating said current draw from said voltage drop, a computer  
3 unit forming part of said motor control circuit compensates for a  
4 temperature of said portion of said conductor.

1           6. An electronically controlled beam especially  
2 comprising:

3           an electric motor having a power line connected thereto  
4 for energizing said electric motor;

5           a motor control circuit connected to said motor and  
6 said power line for electronically controlling said pump  
7 assembly;

8           a pump driven by said motor; and  
9           means for measuring a voltage drop across at least a  
10 portion of a conductor having a definite resistance and  
11 connecting said power line with said motor control circuit and  
12 calculating said current draw from said voltage drop.

1           7. The assembly defined in claim 6 wherein said  
2 portion of said conductor is a piece of resistance wire with a  
3 known specific resistance and a defined length.

1           8. The assembly defined in claim 6 wherein said  
2 portion of said conductor is a bridge between a plug contact to  
3 which said power line is connected and a printed circuit board  
4 carrying said motor control circuit, said bridge having a defined  
5 resistance.

1           9. The assembly defined in claim 6 wherein said  
2 resistance is between 1 and 5 mΩ.

1           10. The assembly defined in claim 6, further  
2 comprising a processor forming part of said motor control circuit  
3 and constituting the means for measuring and calculating.

1           11. The assembly defined in claim 10 wherein said  
2 processor is provided to compensate for the temperature of said  
3 portion of said conductor.

*add  
a1* *add  
b1*